SUPPLEMENTARY MATERIAL

Table S1. Search strategies for meta-analysis of observational studies reporting the Incubation period of COVID-19.

| Database | Search strategy (publications accessible 1 st Dec 2019-8th April 2020) | | | |
|--|---|--|--|--|
| Pubmed | ("Novel coronavirus" OR "SARS-CoV-2" OR "2019-nCoV" | | | |
| | OR "COVID-19") AND ("incubation period" OR | | | |
| | "incubation") | | | |
| Cochrane | ("Novel coronavirus" OR "SARS-CoV-2" OR "2019-nCoV" | | | |
| | OR "COVID-19") AND ("incubation period" OR | | | |
| | "incubation") | | | |
| Google Scholar | ("Novel coronavirus" OR "SARS-CoV-2" OR "2019-nCoV" | | | |
| | OR "COVID-19") AND ("incubation period" OR | | | |
| | "incubation") | | | |
| Embase | ("Novel coronavirus" OR "SARS-CoV-2" OR "2019-nCoV" | | | |
| | OR "COVID-19") AND ("incubation period" OR | | | |
| | "incubation") | | | |
| Preprint servers (i.e. preliminary reports of work that have not been peer-reviewed) | | | | |
| medRxiv and bioRxiv | Pre populated search: | | | |
| | https://connect.medrxiv.org/relate/content/181 | | | |
| | | | | |

Quality assessment scale – adapted from Newcastle-Ottawa quality assessment scale for cohort studies.

External validity

- 1) Representativeness of the study cohort
- a) No selection of cases based on age, sex or general health status, supported by descriptive statistics demonstrating comparability with overall population★
- b) No selection of cases based on age, sex or general health status, not supported by descriptive statistics

 ★
- c) Cases are likely to be biased towards those with more severe COVID-19 symptoms due to selection process e.g. records from hospitalised patients
- d) Cases are selected (e.g. based on age or sex) to represent a particular cohort of individuals
- e) No description of the derivation of the cohort

Internal validity

Exposure window

- 2) Ascertainment of exposure
 - a) original data collected through interview *
 - b) travel period only **★**
 - c) secondary data (using publicly available reports)
- 3) Precision of the exposure window for cases used in final analysis
 - a) only includes cases with a 1-day exposure window *
 - b) only includes cases with less than or equal to 3-day exposure window
 - c) includes cases with a range of exposure windows but statistical methods are used to account for this
 - d) includes cases with a range of exposure windows
 - e) no description/not clear

Outcome

- 4) Assessment of outcome (onset of symptoms)
 - a) original data collected through interview *
 - b) no description/not clear
- 5) Precision of estimate of outcome
 - a) Precise date *
 - b) Window
 - c) no description/not clear

Table S2 Quality assessment of final studies used in the meta-analysis of incubation period

| Study | Quality assessment item category | | | | | |
|---------------------|----------------------------------|---|---|---|---|--|
| | 1 | 2 | 3 | 4 | 5 | |
| Backer et al., 2020 | a | b | c | a | a | |
| Lauer et al., 2020 | a | b | c | a | b | |
| Li et al., 2020 | a | a | e | a | a | |
| Bi et al., 2020 | a | a | c | a | a | |
| Jiang et al., 2020 | b | c | e | b | c | |
| Linton et al., 2020 | b | b | c | b | a | |
| Zhang et al., 2020 | b | a | e | a | a | |
| Ma et al., 2020 | b | c | b | b | a | |
| Leung, 2020 | b | c | c | b | a | |

Figure S1 – Funnel plot of estimates of mu parameter of the lognormal distribution

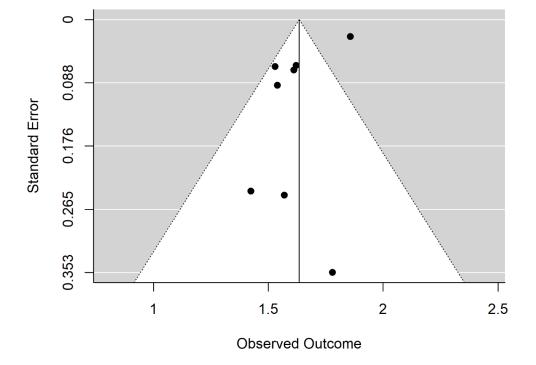


Figure S2 – Funnel plot of the sigma parameter of the lognormal distribution

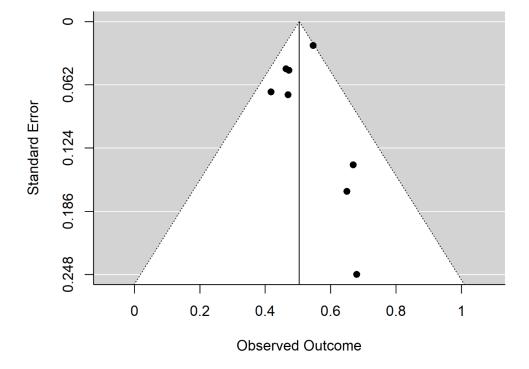


Figure S3 – Incubation period (T1 + T3) in the context of other key parameters important for the transmission of COVID-19.

